

IN THE SPECIFICATION:

Please replace paragraph number [0002] with the following rewritten paragraph:

[0002] State of the Art: A variety of web pages on the Internet now carry spaces set apart for the display of certain content not necessarily native to the site, and often provided (and sometimes hosted) by a third-party, such as, for example, a space housing an advertisement, or content promoting a particular service on a site. Such spaces are referred to herein as “display spaces”: spaces.” Conventionally, when an end user clicks on a display space on a web page, the end user terminal is connected to a server hosting the destination web content of the content provider for the space, and the server then enables an end user to view the content linked to the space at their terminal. Although an end user simply needs to click on a display space to receive display space-linked contents, the more times a user has to click to get to specific content, the greater the likelihood of losing the end user before they arrive. Furthermore, visitors are more and more reluctant to allow being redirected to unknown sites as site owners prefer to keep visitors on their own sites as much as possible. But when a company is advertising on another party’s website, or providing, for example, communication tools to another party’s website, it has heretofore been necessary to provide links to the destination functionality rather than embedding it directly in the other party’s website, resulting in lower usage. Site owners often frown on presenting links and tools that will take visitors away from their web sites.

Please replace paragraph number [0005] with the following rewritten paragraph:

[0005] Other web sites give the appearance of integrated interaction by linking out to a tool on a separate web site. For example, if a web page could benefit from a form of “live-~~chat~~”, chat.” the web page may place a button on the web page that links out to another chat service through an additional window or frame.

Please replace paragraph number [0007] with the following rewritten paragraph:

[0007] The present invention is directed to a system and method for embedding data transmission, used for direct or indirect communication, in a web page. In one embodiment of the present invention, a method is provided for data transmission to take place between one or more display space objects and a backend server. A web page is requested and includes at least one nondisplay space object and at least one display space object which is configured to transmit data to and from the backend server via HTTP or HTTPS requests. The web page is rendered and includes at least one display space and at least one nondisplay space according to the at least one display space object and the at least one nondisplay space ~~object~~ object. The backend server and the client interact via the HTTP or HTTPS requests which happen transparently to the user. The display space object presents the potentially dynamic, interactive interface to the user on the display space on the rendered web page, and data is transferred back and forth between the display space object and the backend server, without the necessity of refreshing the current page, redirection to another web page, or posting the current page or to another web page.

Please replace paragraph number [0010] with the following rewritten paragraph:

[0010] In a yet further embodiment of the present invention, a method is provided for a representative to approach a user over a network. A client requests a web page including at least one nondisplay space object and at least one display space object configured to be able to establish and maintain a communication channel with a backend server. The display space object potentially establishes and maintains a communication channel between the client and a backend server accessible to the representative through the representative software. The web page is rendered and includes at least one display space and at least one nondisplay space according to the at least one display space object and the at least one ~~nondisplay~~ nondisplay space object. The display space object makes its existence known to the backend server and potentially to the representative software, through the establishment of a persistent communication channel, or through HTTP or HTTPS requests. The persistent communication channel may be established at a specified time after the display space object initializes, or ~~at the~~ as a data transmission indicates

that that particular display space object has been flagged on the backend server for the establishment of a persistent communication channel. The representative may initiate real-time communication with the user viewing the display space object once a persistent communication channel has been established between the display space object and the backend server, and the user may communicate back with the representative through the display space object utilizing that channel. The user and representative interact over the persistent communication channel between the display space object and the backend server, to which the representative software is also connected. The communication happens without the necessity of page refreshes, redirection to another web page, or posting to another web page.

Please replace paragraph number [0011] with the following rewritten paragraph:

[0011] In yet a further embodiment of the present invention, a method is provided for two or more display space objects on a web page to communicate with each other. The web page is rendered and includes at least two display spaces and at least one nondisplay space according to the display space objects and the at least one ~~nondisplay~~ nondisplay space object. One or more of the display space objects may communicate with the backend server via HTTP or ~~HTTPS-request, requests,~~ or via a persistent communication channel. Furthermore, one or more of the display space objects may be configured to send and/or listen for method calls to and/or from other display space objects on the web page. Data may be shared between the display space objects on the page, without the necessity of page refreshes, redirection to another web page, or posting to another web page. The graphical user interfaces of the display objects may be altered accordingly.

Please replace paragraph number [0026] with the following rewritten paragraph:

[0026] FIG. 2 is a diagram illustrating an example of a display space on a web page configured for facilitating communications from an object embedded therein, in accordance with an embodiment of the present invention. Similarly, FIG. 10 is a screenshot of an example demonstrating the use of a display space object on a web page configured to enable

communication between a visitor and a representative, in accordance with an embodiment of the present invention. In one embodiment of the present invention, a web page 110 is requested from a server according to generally established principles. By way of example and not limitation, a web page 110 may include media pages such as multimedia pages comprised of one or more of text, graphics, sound and video. The web page 110 may be retrieved over a wide area network, an example of which is the World Wide-~~Web~~ Web, which is also commonly referred to as the Internet. Access of web pages over the Internet utilizes hypertext links that allow a user at a client location to jump to one location on the Internet as specifically distinguished by a unique address, commonly referred to as a URL. The specific web pages are coded, according to one example, in a Hypertext Markup Language ("HTML").

Please replace paragraph number [0027] with the following rewritten paragraph:

[0027] The exemplary network of the Internet is configured on a client/server model in which client software, an example and a portion of which is a ~~"browser"~~, "browser," runs on the local computer while the server software runs on the web host. In an operational configuration after a connection to the network, for ~~example~~ example, the Internet, a browser 100 is launched and a URL identifying a specific web page is entered on the client by a user. The specific URL is sent in a URL request using, for example, HyperText Transfer Protocol (HTTP), which defines the communication protocol between the browser and the server. The URL request is sent to the Internet whereupon Internet routers examine the request to determine which server should receive the request. The server receives the request using, for example, the HTTP protocol. Once the requested web page is identified, the web page is sent back-to-back to the browser at the client. The browser 100 thereupon displays the web page 110 at the client and the HTTP connection is closed but may be reopened upon a subsequent request.

Please replace paragraph number [0028] with the following rewritten paragraph:

[0028] FIG. 3 is an object diagram illustrating the composition of a web page having an embedded display space object therein, in accordance with an embodiment of the present

invention. A nonrendered web page 130 may be comprised of various content objects including text objects, image objects, video objects and audio objects, herein generally illustrated as nondisplay space objects 134. While these nondisplay space objects 134 may be rendered and create visibly perceivable images, the term “nondisplay” is used to refer to objects associated specifically with the “display space” concepts of the various embodiments of the present invention. Nondisplay space objects 134 are generally rendered by a browser as the respective forms of multimedia. The diagrammatically nonrendered web page 130, in accordance with an embodiment of the present invention, further comprises a display space object 136 which is configured, in one ~~example~~ example, as an ad configured to be rendered in a display space 120 (FIG. 1). The display space object may be configured to render, for example, as an ad on a web site, or it may occupy a display space on, for example, a real estate broker’s web page or a retail company’s web page. The display space object 136 may be provided by a third party to the web page owner to augment or advertise on the web page owner’s web page 110 (FIG. 2), such as when the display space 120 (FIG. 2) is configured as an advertisement, an example of which is a banner ad. The display space object 136 is then downloaded to the client browser as part of the web page 130.

Please replace paragraph number [0029] with the following rewritten paragraph:

[0029] In accordance with one or more embodiments of the present invention, the method for communicating via a web page using embedded communication includes an initialization phase and an interaction phase. FIG. 4 is a flowchart of an initialization of a communication channel, in accordance with an embodiment of the present invention. In an initialization phase 98, a user requests 200 that a web page 110 (FIG. 2) be downloaded in accordance with the processes, for example, of a URL request as previously described. The user at the client that is requesting the web page need not be aware that the requested web page includes one or more embedded objects, herein defined as display space objects, as integrated therein. The requested web page including the embedded display space object(s) is downloaded 210 to the client and the HTTP request is terminated. When the object loads on the

page, the display space object may look for a cookie, communicating 214 with the client to retrieve 216 any cookies previously placed with the client. Cookies are configured to store shared object information such as ~~ID's~~ IDs (such as a user ID), status, preferences, and other information. One exemplary application for the use of cookies is to determine if the client has been on the web site previously, and if so, to use the user ID stored in the cookie to then retrieve further information about that visitor.

Please replace paragraph number [0030] with the following rewritten paragraph:

[0030] Furthermore, a display space object, as downloaded, may transmit data transparently 218 to the user between itself and ~~and~~ a backend server. The backend server includes databases, other data and business logic applications, and socket server software, generally referred to as the "backend." Data transmission may be initiated by the display space object at the time it's downloaded (or at an interval thereafter), or upon triggering by the end user. The communication may take place through one or both of the following methods:

(1) Separate HTTP or HTTPS requests that happen invisibly to the end user that transmit data to and from the backend server, and/or (2) a persistent encrypted or unencrypted bidirectional connection with the backend server socket software. One example of a module used to initiate, for example, invisible HTTP requests, includes a plug-in, an example of which is a Flash Player. The Flash Player is a plug-in (helper application) manufactured by Macromedia, Inc. of San Francisco, California, that allows an Internet browser to display high-quality, low-bandwidth, interactive, animated graphics. It also has the ability to make its own HTTP requests, and to establish a connection to a socket server. The Flash Player may be installed as an ActiveX® control or a Netscape® compatible browser plug-in depending upon the browser and operating system. For Windows® based computers using Microsoft® Internet Explorer®, the Flash Player may be an ActiveX® control. Under Netscape Navigator® and Netscape compatible browsers (for Macintosh®, Windows®, Linux and other devices) the Flash Player may be a plug-in. The Macromedia® Flash Player lets designers and developers integrate video, text, audio, and graphics into effective experiences. The Flash Player plays files of type .swf, which is a file type

commonly accepted as safe, unobtrusive to the existent functionality of a web page, and acceptable for use in display spaces.

Please replace paragraph number [0034] with the following rewritten paragraph:

[0034] Any information retrieved from the cookie(s), such as ~~as~~ as a user ID or other cookie-related information may be transmitted to the backend server for indexing and identification of the requesting client. Each display space object may have a unique ~~identifier~~ identifier — whether in the form of an ID retrieved from a cookie identifying the user, or an ID generated at the time the display space object is downloaded, or an ID generated at the time a persistent connection is established between the display space object and the backend server socket software. The display space object may provide data collection forms that may also utilize either of the two methods to transmit data to and from the backend server. For example, in one or more embodiments of the present invention, the display space object collects a visitor's name before allowing him/her to communicate in real-time with a representative. Upon initialization, the display space object checks for any cookies containing the visitor's user ID. If found, it makes an invisible HTTP or HTTPS request to the backend server to send, for example, the ID and request that user's name. The name, for example, is sent in the HTTP or HTTPS response, and the display space object displays a message welcoming the user back, addressing him/her by name. In the case that a shared object is not found, the display space object may, for example, display a form asking, for example, for the visitor's name. At the time that a persistent connection is to be made with the backend server socket software, an inquiry may be sent to the backend server ~~415~~ 414 (FIG. 6) to check the current number of connections and verify that there is an open slot to facilitate establishment of a communication channel according to the current display space object. If there is an open slot for the new display space object, then a communication channel may be created. When a slot is not available for an additional client, then optional content may be displayed by the display space object. Such optional content may be, for example, an application or information form where the visitor may fill out their contact information for contacting at a later time, or, for example, a message

indicating that there will be a wait time before a slot is available. Additionally, the web page is rendered by the browser and displayed 212 according to the web page description as described by both the nondisplay space objects 134 (FIG. 3) and display space object 136 (FIG. 3).

Please replace paragraph number [0037] with the following rewritten paragraph:

[0037] The initialization phase 98 begins with the rendering-121 of web page 110 (FIG. 2) (which includes both the display space 120 and web page space 122), and is completed when all the initialization tasks have run. According to the method of the present invention, processing then awaits 500 interaction from either the user or the backend representative. To this point, an interactive display space has been created for facilitating initiation and control of the interaction by either the user at the client or the backend representative. The display space 120 may be interacted with by either the user at the client and/or the backend representative (through the representative software) where communications are executed through text, voice, video, or image based-“~~chat~~”, chat,” or through leading, for ~~example~~ example, the user, on a tour of other web pages desired to be shared with the other party, or any combination of these.

Please replace paragraph number [0039] with the following rewritten paragraph:

[0039] When more than one backend ~~representatives are~~ representative is utilized in a system environment, the request for communication from the user may be broadcast to several backend representatives allowing, for example, the first available backend representative 442, 444 to select the request and take over-430 440 the communication channel 411 (FIG. 6) with the client 400. A history or log 413 of the interaction(s) between the user and the backend representative may be accumulated 431 which allows the backend representative 442, 444 or the respective representative software 418, 420 to modify interactions with the user based upon previous interactions.



Please replace paragraph number [0043] with the following rewritten paragraph:

[0043] The backend representative 442 through representative software 418 takes control 702 ~~control~~ of display space object 410 through the persistent communication channel 411 (FIG. 6). Backend representative 442 may control the user's experience by manipulating the display space content, by popping up additional windows displaying information of interest, such as sales promotional information or otherwise, or by ~~re-~~redirecting the page to another URL. The channel 411 established by the display space object 410 enables ongoing exchange of information and control between the user via the display space 120 (FIG. 2) as controlled by the display space object 410 and the backend representative 442 via the backend server 414 executing business logic 415 thereon.

Please replace paragraph number [0045] with the following rewritten paragraph:

[0045] A history or log 413 of the interaction(s) between the user and the backend representative 442 may be accumulated 708 which allows the backend representative 442 or the ~~respective-backend~~ representative software 418 to modify interactions with the user based upon previous sessions. The display space object 410 also has access to the history or log 413 of the interactions in order to be responsive thereto for enabling personalization of the display space 120 (FIG. 2).

Please replace paragraph number [0046] with the following rewritten paragraph:

[0046] FIG. 8 is a screenshot illustrating the layout of representative software, in accordance to an embodiment of the present invention. The representative software may include several modules that perform functions to facilitate the collection, storage, management, filtering, tracking, reporting, statistical analysis, interaction and communication, follow-up, and conversion of leads. Search criteria 810 are used to filter leads according to various attributes such as source, dates received, follow-up dates, name, email, progression stage, representative assigned, etc., and to produce a list of leads 820. Selecting a particular lead may bring up pertinent information about that person, including their contact information 830 and a history of

all interactions 840 with that person-~~840~~. The history may be divided into types of tasks such as phone calls made, emails sent, emails received, placement with other representatives, notes made, and transcripts of real-time chat interactions, etc.

Please replace paragraph number [0048] with the following rewritten paragraph:

[0048] Clicking on a visitor ~~in~~inqueue creates a chat session instance 915. The representative may toggle between chat instances and when an instance is selected, the contact info collection form 910 may be populated with any contact information that has been gathered about the user. Such information may be added and updated as it is collected. The source of the lead (e.g., the web site the visitor is viewing) is also tracked. The history of the chat interaction is listed in the current chat history 920, and is logged to the permanent lead history 840 (FIG. 8). The invite trigger 925 is used for escalation and/or de-escalation, to invite another representative in on the chat. Clicking that trigger will cause the active visitor to be listed in the queue of the appropriate representatives (based on role), and it may alert them. There are common blocks of text referenced in the quick response tool 930 that the representative may use to auto-populate the textbox where they type in the text they send. This makes for less typing on the part of the representative. If the representative needs to open up a URL for the visitor, they may do so by selecting it and using the open URL trigger 940.

Please replace paragraph number [0049] with the following rewritten paragraph:

[0049] FIG. 11 is a series of screenshots that show the progression of a display space object, in accordance with the present embodiment of the invention, in the form of a banner ad wherein communication is initiated by the visitor. In this embodiment, the visitor is prompted to establish the connection by entering an identifier 1100 in order to log in, which in the present example is illustrated as a name. In another embodiment, the user may click a button, for example, “Chat-~~Now~~”, Now,” and an identifier may be generated automatically, for example, through the backend server. The connection 1110 is made-~~1110~~, providing that there is a

**Serial No. 10/785,124**

connection socket available and contingent on there being a representative available, and the two-way chat may begin 1120.